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The Effect of Touch: Bringing Touch Back to the Bedside

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### **Introduction**

The word touch is a verb, an action; it is something that an individual takes part in. In today's day and age, the act of touch is vital. People touch their smart phones, tablets, and smart TV's. People are able to turn off all the lights in their home, 400 miles away, at the touch of a button. Touch has become more attached to the use of technology and is starting to lose its main intention. According to Merriam-Webster, touch is "to bring a bodily part into contact with, especially so as to perceive through the tactile sense: handle or feel gently usually with the intent to understand or appreciate" ("Touch," 2015). Touch is losing its role between two human beings and is quickly being replaced with touch between human and machine.

Touch can break down walls between families, friends, and even strangers. The connection and emotion felt between two people during touch has no comprehension of race, age, or gender. Touch is showing compassion for another human being. Touch can break down statures of educational and monetary status and bring two people down to what they really are, human beings. Patient's suffering from illness want to be treated and cared for by a provider that will take care of them for what they are, human beings. Patients want to feel that providers would care for them as if they were their own family and be shown the same compassion. If touch is showing compassion, and patients want to be shown compassion, then shouldn't the act of touch be utilized within a providers practice?

Standard care is what medical professionals practice. Complementary medicines are practices that can be used in conjunction with standard care but are considered outside of standard care measures. An example of complementary medicine would include biofield therapy,

which includes the practice of healing/therapeutic touch. Healing touch (HT), a biofield therapy, is performed by the provider placing their hands over the patient and focusing on transferring energy fields. There is no actual tactile contact with the patient. HT is believed to create a relationship between the provider and patient that facilitates the patient's healing and health. HT therapy, according to recent research studies, has shown to improve medication adherence, decrease psychological issues, and present a positive impact at the cellular level, which will be explored further within this paper. HT has been thought of as a link to heal disrupted energy fields of human beings. Martha E. Rogers, a nurse theorist that authored *The Theory of Unitary Human Beings*, believes that human beings are one with the environment and energy fields are what connect the living and non-living. Rogers focused on teaching nurses how to practice therapeutic touch and remain aware of the patient's environmental energy field. A disruption in a patient's energy field could impede a patient's journey to health and cause further illness (Nursing Theory, 2013). In 1994, the North American Nursing Diagnosis Association (NANDA) accepted "Disturbed Energy Field" as an approved nursing diagnosis in response to complementary therapy and the emerging role of biofield therapy in the nursing and medical world (NANDA International, 2015). This paper will explore the effect that touch, administered by a provider to a patient, can have on patients and implications for practice.

### **Health Promotion**

The health promotion model that best correlates with the effect of therapeutic touch on patients would be Myra Levine's Conservation Theory. Levine's major concepts of her Conservation Model include adaptation, wholeness, and conservation. Levine addresses the promotion of adaptation and believes it to be ongoing and varied in each individual. Adaptation can create an organismic response, which results in a change in one's behavior for protection and

maintenance of integrity. When integrity is assured, then wholeness can be achieved. Levine focuses on promotion/maintaining wholeness for the patient. Conservation is a product of an individual's adaptation. Levine believes conservation to be a balance of energy within each individual; as a unique, internal supply and demand system within each person. She further described the *Four Conservation Principles* that conserve an individual's wholeness. These include: 1. Conservation of energy, 2. Conservation of structural integrity, 3. Conservation of personal integrity, and 4. Conservation of social integrity. In relation to the effect of touch, Levine's conservation of energy focuses on preserving the patient's energy and creating a balance between expenditure and rest. The nurse can do this through providing adequate rest, exercise as tolerated, nutrition, and with the emergence of complementary therapy could do so with healing touch. Levine's conservation of personal integrity focuses on recognizing the patient as an individual by showing respect and recognizing and protecting their space. The nurse should treat the patient as a human being and not just another chart (Levine, 1972).

Levine's nursing paradigm includes the person (patient) and the environment, which is further broken down into the internal and external environment. The external environment is further divided into the perceptual, operational, and conceptual environment. The perceptual environment includes the patient's response to sensory stimulation. This is where the patient responds to taste, touch, sound, and balance. The conceptual environment focuses on the exchange of language, emotions, religious beliefs, cultures, and psychological patterns. These two external environments are directly related to the effect that touch can have on patients. The provider is the external environment, that with touch, can help the patient not only feel the actual touch, but help them feel emotion through it as well. Levine further quotes, "Ethical behavior is not the display of one's moral rectitude in times of crisis, it is the day-to-day expression of one's

commitment to other persons and the ways in which human beings relate to one another in their daily interactions” (Levine, 1972). Levine’s concept breaks down the provider and patient relationship into what it really is; a relationship between two human beings.

### **The pathophysiologic effect**

Touch between two individuals has been thought to provoke pathophysiologic changes. Cohen, Janicki-Deverts, Turner, & Doyle (2015) performed a study in which they infected patients with two viruses that cause common cold-like illnesses and then placed them under quarantine for 6 days. The patients were assessed on their symptoms daily and then able to return home. Telephone interviews were conducted afterwards to calculate the amount of social interactions they had with other people and if they had received any hugs that day. The results of the study concluded that the patients that had a greater social support system and had received more-frequent hugs had less severe signs of illness. This data suggests that human contact, such as physical contact, may have a positive impact on patient outcomes during illness.

Lutgendorf et al. (2010) in their prospective, randomized, clinical trial reported that HT performed on the study participants, women receiving chemotherapy for cervical cancer, had preserved natural killer (NK) cell activity. NK cells are a major line of defense in the immune system. They can mount an attack and destroy tumor cells upon first presentation of the cell. The same participants within the study also had decreased levels of depression at the end of the study. It would be of worth for further study to determine if gentle, caring touch, from providers to their patients, could sustain or even increase NK cells.

Reiki, another form of biofield therapy, has been emerging and moving towards the healthcare field. Friedman, Burg, Miles, Lee, & Lampert (2010) reported in their randomized

controlled study that Reiki yielded increased vagal activity of immediate post-acute coronary syndrome patients. Salles, Vannucci, Salles, & Paes da Silva (2014) found in their experimental, double-blind study that Reiki had a positive effect on reducing abnormal blood pressure. It would be of benefit to determine whether gentle touch could reproduce the same effects of the studies listed above.

Touch between two people often exerts some form of a relationship. Oxytocin is a hormone that is thought to play a role in bonding between two individuals. Morhenn, Beavin, & Zak (2012), in their research found that moderate-pressure back massage increased participant levels of endogenous oxytocin. The massages were conducted by massage therapists that were strangers to the participants. If oxytocin levels can be increased during massage from strangers, it would be paramount to determine whether gentle touch, incorporated into established patient-provider relationships, had an effect on oxytocin.

### **The effect on medication compliance**

Medication compliance in patients is a struggle that providers face day-to-day, especially in patients with a comprehensive medication regimen. Gueguen, Meineri, & Charles-Sire (2010) conducted an experiment to test whether tactile contact with a patient, from a practitioner, would increase medication adherence. The patients were divided into an experimental group that received tactile stimulation and a control group that did not. Each of the patients selected were treated with penicillin to take twice daily for seven days; however, before the patients in the experimental group would leave the room, the practitioner would walk them to the door, light touch the patient on the forearm and say “It’s very important for you to take your medication in

order to prevent recurrence” (Gueguen, Meineri, & Charles-Sire, 2012). In the control group the patients would receive the same education but received no tactile contact.

Eight days after the initial experiment the patients were visited at home and asked to provide their pill bottles for a pill count, if they thought their practitioner was competent, and if they thought the practitioner showed concern for them. The results of the study concluded that patients that received tactile contact perceived their providers to be more competent and more concerned about their patients. There was a higher level of medication adherence in females regardless of tactile contact; however, there was an increased level of medication adherence in the males that had received tactile contact. Also, the patients that received tactile contact had less pills remaining in their bottles at the 8 day follow-up. This study concluded that a combination of verbal and non-verbal cues was associated with an improvement in patients’ perception of their provider and increased medication compliance (Gueguen, Meineri, & Charles-Sire, 2012).

### **The psychological effect**

Touch from a provider, whether it is HT, TT, or even gentle touch such as a simple lying of hands on a patient’s shoulder when discussing diagnosis, is an action that providers should consider. These actions could possibly ease psychological distress in their patients. Latchem & Kitzinger (2015) found in their qualitative, multi-method design of residents and family members of patients with neurological disorders, living within a long-term center in England, that caring touch was one of the most important aspects in their care, and it even helped decrease feelings of distress. One participant even stated “Touch helps, just to feel human.”

Jones & Glover (2012) conducted a mixed-method study design with students to determine their feelings of touch between the student and teacher, on a professional level, while

learning the Alexander Technique, which is a psycho-physical technique that teaches individuals how to release muscular and mental tension. The participants were interviewed in a group setting where qualitative data was collected and forged into a survey that was sent out to a larger amount of students. The results of the study concluded that the students found touch to elicit feelings of encouragement, a healing experience, a physical and emotional release, and believed they obtained a sense of reassurance and safety from the teacher. The students reported a feeling of maternal nurturing from their teacher after being touched. The students also reported that when they were touched by their teacher (professionally), they felt that the teacher was giving them a part of themselves and “sharing the load.” This leaves one to question whether these same feelings can be elicited in the relationship between provider and patient.

Fibromyalgia is a common, often difficult, syndrome that providers manage in a vast amount of their patients’ .Often high doses of antidepressants, pain medication, and sleep aids are required to treat these patients. Demirbag & Erci (2012) in their pre-test/post-test control group design found that a combination of touch, music, and aroma therapy, in patients with fibromyalgia, showed a significant decrease in symptoms such as bowel complaints, tearfulness, restless sleep, headache, morning fatigue, and exhaustion. These same patients also experienced decreases in depression levels. This is crucial information for providers to consider in helping decrease medication usage which would, in turn, decrease medication adverse reactions.

Agitation and anxiety are also common emotions that patients experience, especially when admitted into the hospital setting. Patients undergoing mechanical ventilation often face agitation and anxiety and express this through a decrease in pulse oximetry, violent jerking, removal of catheters and clothing, and even removal of ventilator tubing. Lakie, Bolhasani, Nobahar, Movahedi, Mahmoudi (2012) conducted an experiment with ventilated patients within

an ICU setting to determine whether gentle touch from the nurse, while performing nursing interventions, decreased patient agitation and anxiety, which was measured by pulse oximetry. The results of the study concluded a significant increase in oxygen saturation levels in the patients in the experimental group, after intervention. This is crucial information for providers to consider. If gentle touch can decrease agitation and anxiety in intubated patients, what could result with physical touch between providers and their patients in a simple office visit?

Uchida, Takehiko, Yamaoka, Nitta, & Sugano (2012) conducted an experiment to determine whether biofield therapies could stimulate specific brain waves to transmit pleasant or unpleasant stimuli, through the autonomic nervous system, endocrine system, and immune system. The experimental group received Okada Purifying Therapy (OPT), a form of biofield therapy that emits bioenergy from the practitioner to the participant. The results of the study concluded that the participants rated significant decreases in tension-anxiety, depression, anger-hostility, and confusion, and their scores for vitality increased; however, this change was significant for both the experimental and control group. Suzuki, Uchida, Kimura, & Katamura (2012), in their cross-sectional study found that OPT therapy improved symptoms of palpitations/dizziness, anxiety/depression, and even pain in their participants. There is no tactile contact with OPT therapy, as with HT. Further research would be beneficial to determine if gentle touch, during a provider-patient encounter, could elicit the same results of the two studies mentioned above.

Bundgaard, Sorensen, & Nielsen (2011) performed field observations within an endoscopic out-patient clinic and collected data from nurses and patients on their views of physical touch from the nurses during patient contact. One patient believed that physical touch from the nurse perpetuated feelings of protection and safety and even stated “Yes, this contact

makes me feel safe, I feel that someone is present.” The researchers found that the touch from the nurse increased the patient’s confidence in the nurse; furthermore, patients felt that the nurses that lacked physical touch with patients also lacked a presence and caused feelings of insecurity and discomfort. One of the nurses that reported often using physical touch with their patients stated “I feel closer to the patient when I use physical touch and I experience how the patient reaches out for my hand when I touch him. Like a reassurance that I’m still there.” Several of the nurses offered their hand for the patient to hold during the gastroscopy. The researchers observed one patient voice to their nurse, “It was very uncomfortable, but it helped squeezing your hand.” This leaves room for further research to address whether nonsexual, caring, physical touch from the provider can increase patient feelings of reassurance, safety, and confidence in their provider.

Karlsson & Bergbom (2010) conducted a hermeneutical interpretation of Lars Gustavsson’s autobiography *Leva Vidare* (Continue to Live). Lars is a Swedish poet that suffered life threatening burns and was anesthetized during his treatment and stay in an intensive care unit. He reports, in his autobiography, having a consciousness to what was happening around him. He discussed the care he received from nurses and providers, in his novel, and referred to them as “carers.” The researchers interpreted his autobiography in having two main phenomena, “being cared for” and “not being cared for” and illustrated that one of the most important relationships Lar’s witnessed was with “The Carers who had love in their hands.” The researchers described these “carers” as those that that mediated love when they touched Lar’s wounded body. Lar’s clarifies, within his autobiography, “what made a difference was the fact that they had love in their hands. That made the whole thing softer. That made the bandages softer. I could feel the warmth after their fingers for hours afterwards.” The researchers also clarified that Lar’s believed their loving hands had nothing to do with age or education from his

statement, “They could be of different age and education; the thing they had in common was the intention.” This breaks the down the nurse-patient or even provider-patient relationship down to a humanistic level, to a level of pure caring and compassion, a level that should always be utilized when transferring care to patients.

### **Effect on patient discomfort**

Pain is a major issue within the healthcare system. Providers are often faced with the dilemma of trying to achieve adequate pain control for patients without creating adverse reactions such as respiratory depression and over-sedation. Patients that suffer from cancer and undergo chemotherapy require a substantial amount of pain medication to control their pain, which can be very dangerous. One could see why providers should look to more wholistic methods to cut down on adverse reactions. Shehab (2011) conducted a review of literature and summarized that therapeutic massage was predominantly safe and effective in decreasing stress and anxiety in cancer patients, and in regards for pain control looked promising; however, further research was warranted. He also summarized literature on the effect of therapeutic touch on fatigue and pain in cancer patients and found that patients undergoing chemotherapy that had received therapeutic touch reported a significant decrease in pain and fatigue.

Sahawneh (2011) conducted a review of literature and summarized that massage and therapeutic touch (TT) decreased fatigue and mood disturbances in patients undergoing chemotherapy. They also reported that gentle touch decreased pain levels in patients undergoing chemotherapy. Anderson & Taylor (2012), in their review of literature, summarized multiple articles that deemed HT to show a significant reduction in pain and fatigue in patients undergoing chemotherapy. Coakley & Duffy (2010) studied the effects of therapeutic touch in

post-op vascular surgical patients. The results of their study concluded that patients that received TT had lower levels of pain, decreased levels of cortisol, and increased levels of NK cells one hour post intervention; however, the researchers concluded that the levels of cortisol and NK cells could have been attributed to regular responses post-surgery and further study was suggested. Further research within this realm would be of great benefit, especially in regards to gentle touch.

Thomas, Stephenson, Swanson, Jesse, & Brown (2013) conducted a parallel-group randomized control trial to compare HT with music and attention-control with music, in patients suffering sickle cell disease, to determine whether there was significance in the patients that received HT. The results of the study concluded that the patients that received HT had more improvement in relation to pain; however, there was no significant reduction in pain medication usage for the patients that received HT, but there was an overall reduction in pain medication usage among both groups. Further study was warranted by the researchers.

In continuing the effects of HT therapy, Lu, Hart, Lutgendorf, & Perkhounkova (2013) conducted a randomized control trial to determine whether HT had an effect on pain levels, mobility, joint function, and depression in patients with osteoarthritis. The researchers concluded that the patients that had received HT had significant decreases in pain severity, depression, and had improved joint function, but there was no change in flexibility of the affected joint. It would be interesting to research the effect that gentle touch, from a provider, could have on patients in an orthopedic clinic. When orthopedic providers provide education to their patients on diet, exercise, and smoking cessation to help decrease their symptoms, it would be beneficial to see if patients would show more compliance if they had a deeper relationship with their provider; a more personal level that included gentle, caring touch.

## **Discussion/Evaluation**

The provider-patient relationship plays a crucial role in patient outcomes and how patients perceive their providers. Naylor & Kurtzman (2010) summarized that nurse practitioners out-performed MD's in dimensions of patient satisfaction, consultation time, and follow-up. Nurse practitioners (NPs) are on the rise, especially with the new changes within the healthcare system in relation to the Affordable Care Act and the increasing number of patients with insurance. Dr. Carole R. Myers, PhD, RN, during her presentation at the Tennessee Nursing Coalition, professed that in the near future one-third of all doctors will be retiring and only one-third of doctors will actually work in primary care (Myers, 2014). These are some alarming rates for healthcare. It is crucial that nurse practitioners are present and capable to fill these gaps for the future health of the population.

There is a vast amount of research that validates increased patient satisfaction when being treated by an NP. At the 26<sup>th</sup> Annual American Academy of Nurse Practitioners meeting, in June of 2011, it was reported that patient satisfaction was higher among patients that had been treated by an NP as compared to those that had been treated by an MD (Creech, Filter, & Bowman, 2011). Patients often report that NPs display more compassion and spend more time with them. NPs are nurses with advanced training, that at one point in their career were at the bedside. Whether nurse or NP, both are patient advocates. NP's are the way of the future and it is pertinent that every opportunity is taken to provide patient-centered care to increase patient outcomes and satisfaction. It is up to NPs to set the framework for other healthcare providers to follow. When a therapeutic rapport and relationship is established with patients, patients will have confidence in their providers and increased satisfaction results in better outcomes which

results in increased reimbursement. It would be foolish for providers to not utilize every option to increase patient outcomes.

The purpose of this literature review was to explore different methods of touch and whether they are beneficial in healthcare. Methods of biofield therapy have proven significant in the studies mentioned above; however, providers should consider using simple methods of gentle, nonsexual, touch with their patients as a starting point. The use of biofield therapy within the office and hospital setting would have to be further studied to prove cost efficiency in relation to patient outcomes. Based on the literature mentioned within this paper, it would be imperative that more research be conducted to determine whether gentle, nonsexual, touch can increase patient outcomes. It would even be of benefit for providers to consider using gentle, nonsexual, touch in their practice. There is no cost involved in touching the patient on their shoulder before exiting their room, or even lightly touching their knee while stating “is there anything else I can do for you?” Gentle touch can be performed with every patient interaction, no matter how brief, and cultural preferences can still be upheld.

### **Conclusion**

There is a vast amount of research available on the positive effects of biofield therapy, which suggests its effectiveness; however, the recent research on the effect of patient touch by providers is lacking. Further research is imperative to determine if patient outcomes can be improved. Based on the research mentioned previously, biofield therapy has shown to decrease patient’s pain, which can decrease the amount of pain medication taken, which could ultimately decrease the amount of adverse reactions. The same holds true for the decreases in patients’ psychological symptoms with biofield therapies. It would be fascinating to see whether gentle

touch could result in the same outcomes. In the studies that addressed patient touch, the results deemed increased patient medication compliance and increased confidence in their provider, which is vital information for providers to consider in their practice.

The role of the provider is to do no harm, and any way that a patient's health could be improved should be considered. Healthcare often needs to be broken down into its simple goal-healing human beings by practicing nursing using Myra Levine's Conservation Theory. Nurse practitioners should always remember their humble background in nursing, be an advocate for their patients, and uphold the provider-patient relationship. It is imperative that NP's take the first step in incorporating gentle touch in their practice and set the framework for further research. As Florence Nightingale once stated, "I never lose an opportunity of urging a practical beginning, however small, for it is wonderful how often in such matters the mustard-seed germinates and roots itself" (Nightingale, 1914).

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